

FIG. 1

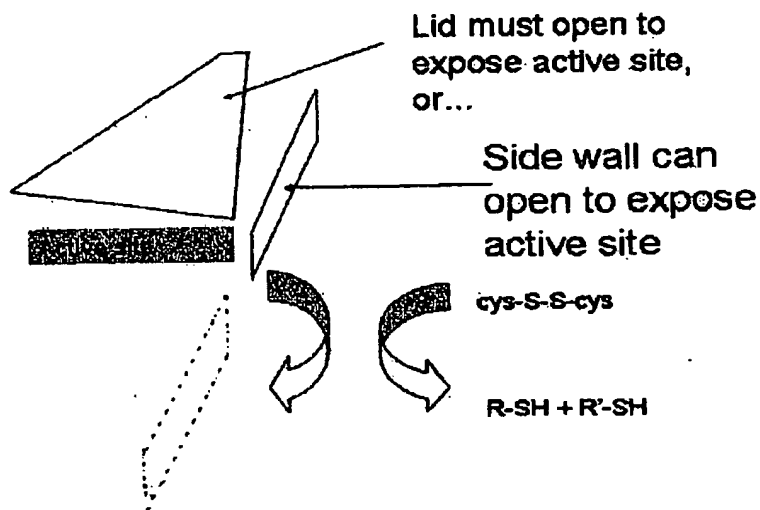
tACE: Natesh et al. Nature 421:551, 2003



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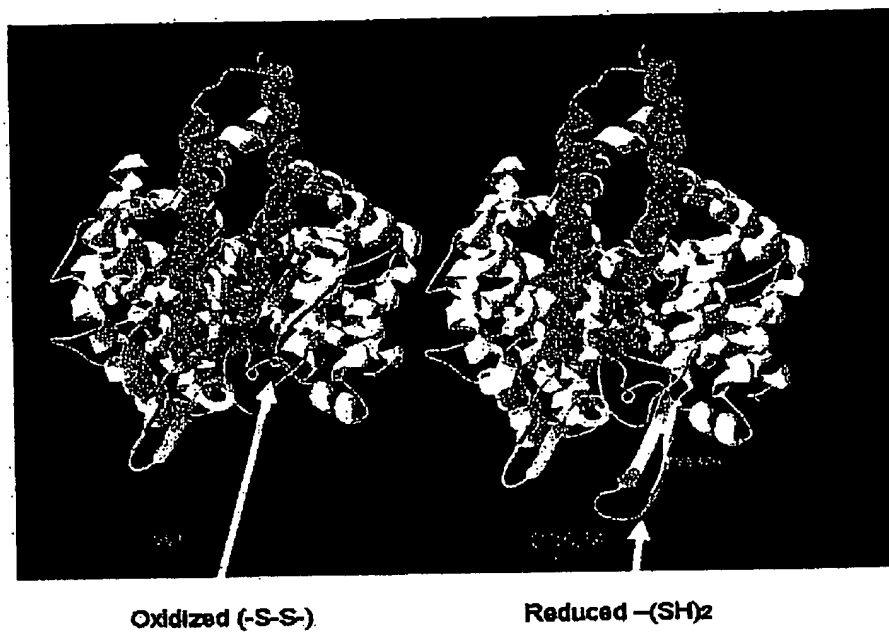
FIG. 2

tACE as redox sensor



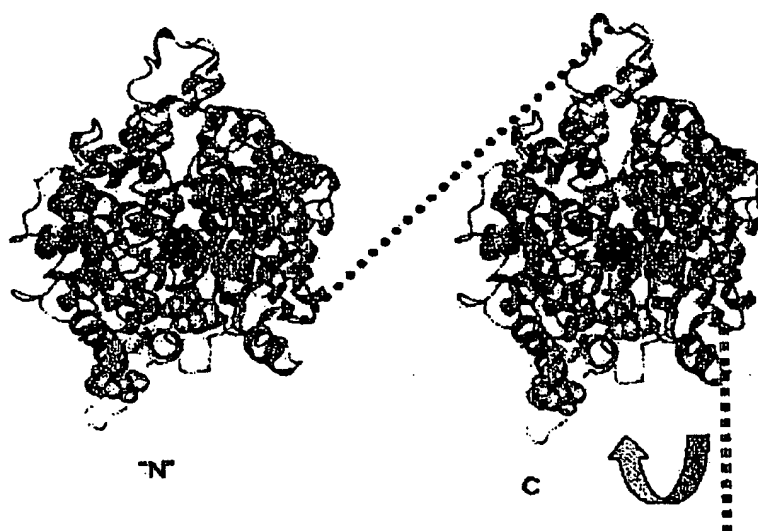
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FIG. 3



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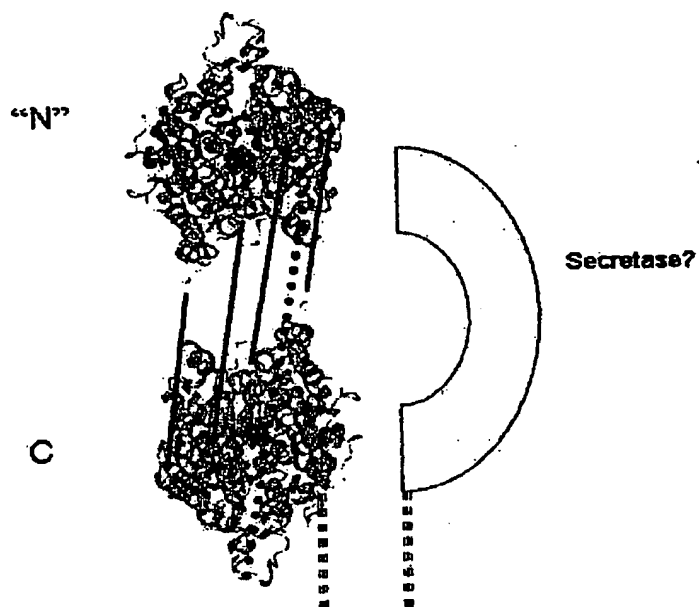
FIG. 4A



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FIG. 4B

Note: "Tongue-in-groove" fit



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FIG. 5

sACE: Dimerization via a Disulfide Zipper

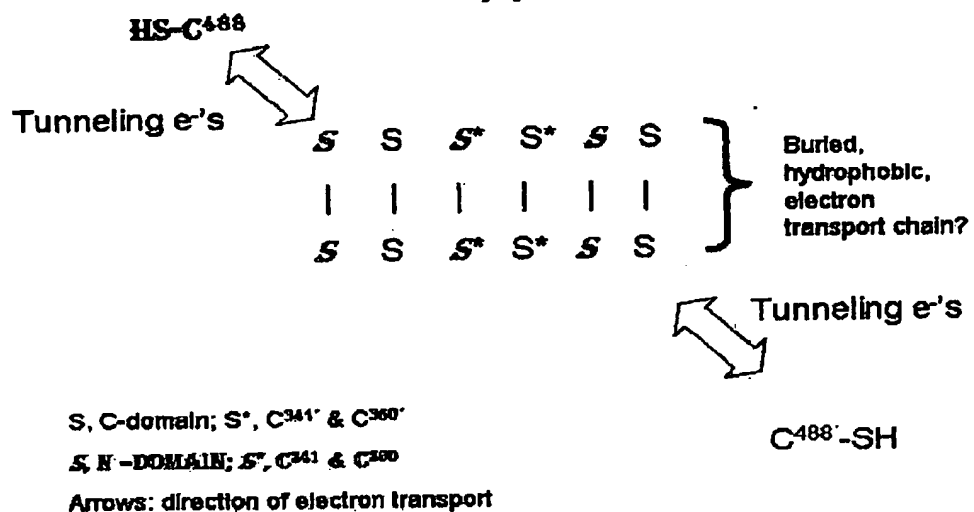
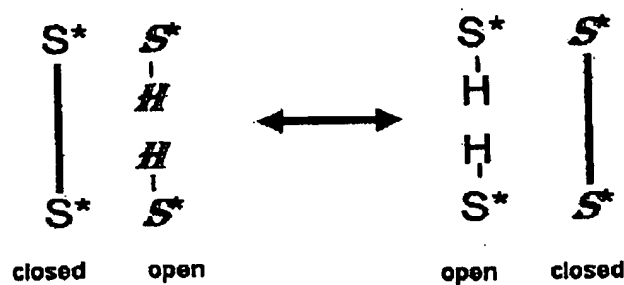


FIG. 6

sACE: a reciprocating enzyme with higher k_{cat} than tACE?

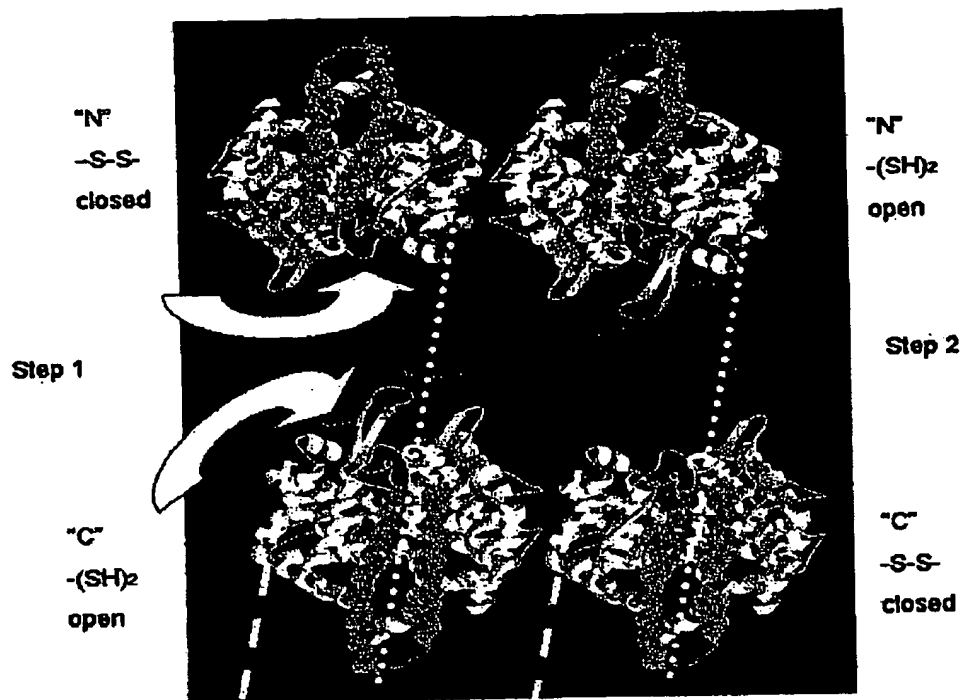


Activated by a single pair of electrons

S^* , C-domain cysteine 341' or 360'

S^* , N-DOMAIN CYSTEINE 341 OR 360

FIG. 7



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FIG. 9

sACE: Inactivation by NO

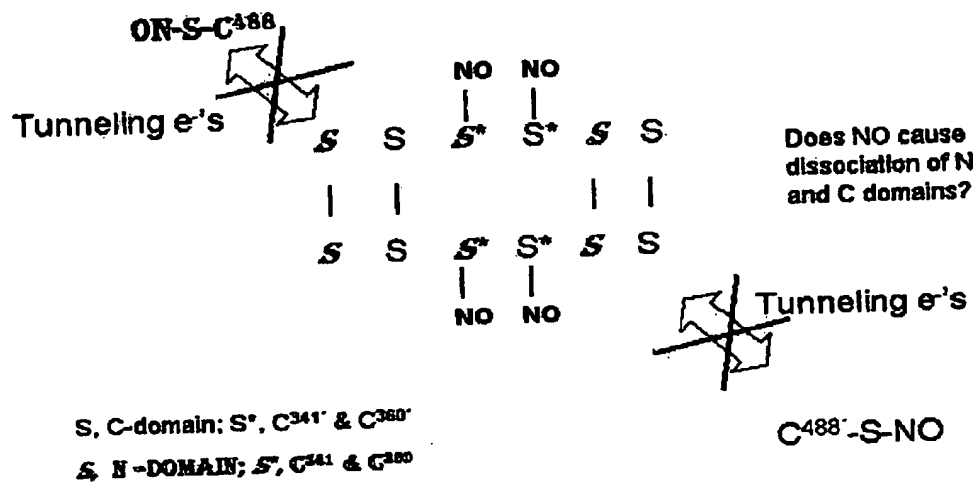
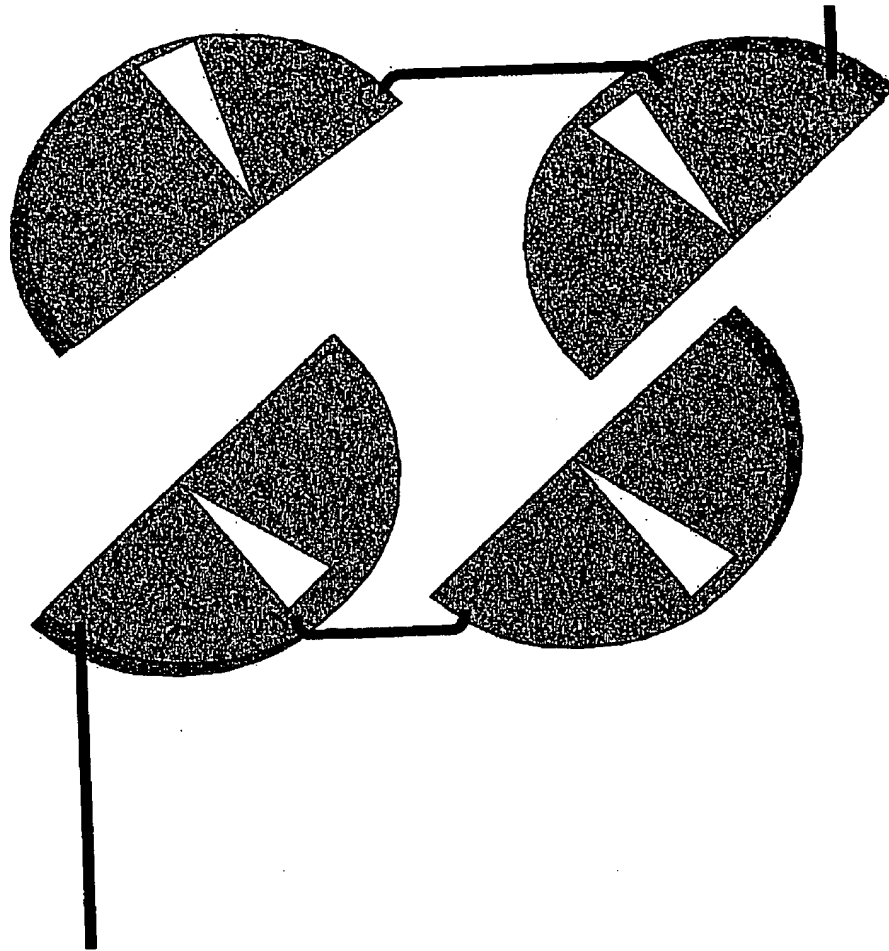


FIG. 10

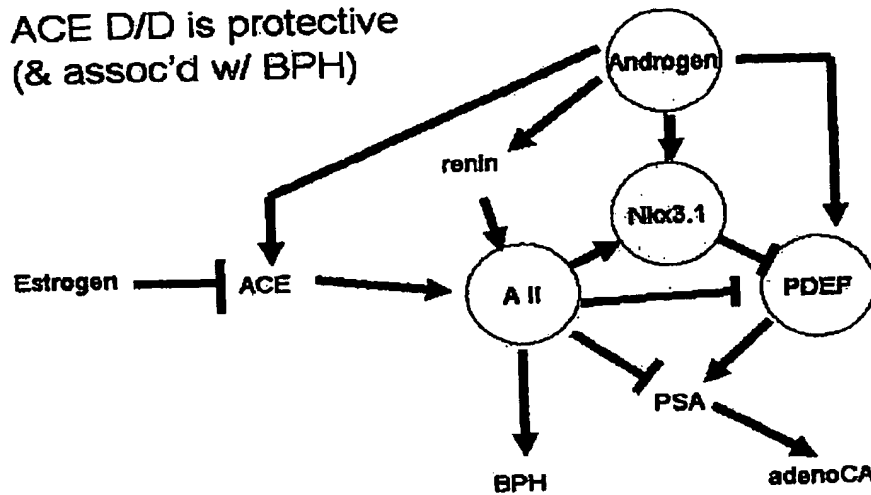


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FIG. 11

Prostate Cancer in White Men

- ACE D/D is protective (& assoc'd w/ BPH)



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